



ALAMEDA COUNTY  
CONGESTION MANAGEMENT AGENCY

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**Memorandum**

*July 13, 2009  
Agenda Item 4.4*

**Date:** July 2, 2009

**To:** Plans and Programs Committee

**From:** John Hemiup, Senior Transportation Engineer

**Subject:** **East Bay SMART Corridors Program - Operations and Management (O&M) Funding Plan and Activities**

**Action Requested**

It is recommend that the Board support this conceptual two-year funding/cost-sharing plan for the Operations and Management of the SMART Corridors program to sustain the system operation until June 30, 2011. ACTAC is scheduled to consider this item on July 7<sup>th</sup>.

**Discussion**

The East Bay SMART Corridors program is a cooperative effort by the Alameda County Congestion Management Agency (CMA) and 27 other partner agencies to operate and manage a multi-modal advanced transportation management system along five Corridors. They are: 1) I-80 and I-880 Corridors, 2) the Grand MacArthur Corridor, 3) the I-580 Corridor, 4) the International Blvd/Telegraph Avenue SMART Corridor, and 5) the Tri-Valley SMART Corridor.

The CMA in association with West Contra Costa Technical Advisory Committee (WCCTAC) and AC Transit, have funded the O&M of the SMART Corridors Program for the last eight years. The current funding plan includes funding from the CMA TIP, WCCTAC, AC Transit, Tri-Valley Transportation Council as well as federal CMAQ funds.

The benefits of the SMART Corridors Program is to provide a regional overview of traffic conditions to local and State agencies, as well as the public, through camera images and traffic data. In addition, the SMART Corridors Program maintains Emergency Vehicle Priority (EVP) and Transit Signal Priority (TSP) infrastructure along to I-80 (San Pablo Avenue) and I-880 (International Blvd.) Corridors to provide traffic signal priority to emergency and transit vehicles.

The approximate one million dollar per year requested by the CMA SMART Corridors Program is to maintain an already existing infrastructure that has been developed over the past eight years, and new infrastructure that is coming online this coming year, that represent an approximate capital investment of \$40 million dollars.

Proposed Expenditure and Funding Plan-FY 2009/10 and FY 2010/11

A shortfall in the current (08/09) O&M funding was addressed by the Board at its March 2009 meeting. This action programmed \$250,000 of CMA TIP funds.

A conceptual two-year funding and cost sharing plan for fiscal years 09/10 and 10/11 will be presented to the ACTAC for member consideration and discussion as shown in Table 1.

As the managing entity of the SMART Corridor O&M, the CMA continues to pursue legislation for a long term option for O&M funding, such as the Hancock bill (SB 205) which would provide vehicle registration fee revenues as a possible source of long term funding for O&M. It should be noted that the SMART Corridors O&M may need to be terminated unless a plan for funding the next two years of O&M can be secured within the next two to three months.

Current funding of the O&M Plan relies on the participation of all O&M partners. If additional funds are not realized in this proposed two year plan, CMA may need to revert O&M to local agencies that are the owners of the SMART Corridor's infrastructure, or terminate the project.

**Table 1 - Summary of Anticipated Annual O&M Expenses by Corridor**

**FY 2009/10**

Cost Category  (Operations or Management) <sup>(O/M)</sup>		I-80 & I-880 SMART Corridors	International- Telegraph SMART Corridor	(c) I-580 Corridor	(c) Tri- Valley SMART Corridor	Grand MacArthur Corridor	TOTAL
1. Communications <sup>(O)</sup>	Wireless	\$62,200	\$17,400	\$11,000	Local Agency	\$8,700	\$99,300
	Wireline & Managed Services	236,800	78,000	50,000	(a) 29,700	39,000	433,500
2. Field Utilities <sup>(O)</sup>		13,800	4,300	Local Agency	Local Agency	2,150	20,250
3. Centralized ATMS Software <sup>(M)</sup>		50,000	25,000	25,000	(b) 12,000	12,500	124,500
4. Agency ATMS System <sup>(M)</sup>		46,200	12,000	12,000	Local Agency	6,000	76,200
5. ATMS Field Equipment <sup>(M)</sup>		105,000	96,000	Local Agency	Local Agency	48,000	249,000
<b>TOTAL (O&amp;M)</b>		<b>\$514,000</b>	<b>\$232,700</b>	<b>\$98,000</b>	<b>\$41,700</b>	<b>\$116,350</b>	<b>\$1,002,750</b>

Notes:

- (a) This cost is for Optical-Ethernet-Metropolitan Area Network (OPT-E-MAN) and Cross-Connect Services
- (b) This cost is for the management of the Broadware Server
- (c) Cost sharing opportunities between the I-580 & Tri-Valley Corridors are being explored

## System Components

The East Bay SMART Corridors includes Advanced Transportation Management Systems (ATMS) field components which rely upon centralized software and hardware. The following are the principal components involved in operating and managing the SMART Corridors program:

1. Communication System – Communication lines between the centralized system and field components are leased from AT&T (formerly SBC) for wire-line connections and AT&T (formerly Cingular) for wireless communication. AT&T is responsible for maintenance and troubleshooting of the communications network.
2. Field Utilities – The closed circuit TV (CCTV) and video streaming equipment use dedicated electrical power as the system does not rely on the power from local jurisdiction. Field utilities are provided by PG&E.
3. Centralized ATMS Software and Management Services – The centralized software requires routine maintenance and upgrades. These services are currently being provided by AT&T DataComm.
4. Agency ATMS System – Each participating agency is provided an ATMS workstation that provides real-time information about traffic conditions and statistics along the project corridors. The workstations are housed at each respective agency and are maintained by consultants to ACCMA. They also maintain CCTV video processing components.
5. ATMS Field Equipment – The field elements of the Advanced Transportation Management System of the project are comprised of Closed Circuit TV, non-intrusive vehicle detection system, and emergency preemption and transit signal priority elements. Currently, a consultant to ACCMA is providing these services.
6. Signal Control System – Signal control system, including traffic signal controllers, signal operation, signal appurtenances and video/inductive loop detection system is owned and maintained by each operation agency. ACCMA has no responsibility for this component of the system.